

# Pre-Bid Meeting Next Generation Science Standards Curriculum, Instruction, and Professional Development

January 11, 2018 (2:00 pm)



#### **Overview & Dates**

The State of Delaware Department of Education, seeks professional services to enter purpose for solicitation. This request for proposals ("RFP") is issued pursuant to 29 *Del. C.* §§ 6981 and 6982.

The proposed schedule of events subject to the RFP is outlined below:

Public Notice Date: January 5, 2018

Pre-Bid Meeting Date: January 11, 2018 at 2:00 PM (Local Time)

Deadline for Questions Date: January 19, 2018

Response to Questions Posted by: Date: January 26, 2018

Deadline for Receipt of Proposals Date: February 2, 2018 at 1:00 PM (Local Time)

Estimated Notification of Award Date: March 2018

#### The Delaware Science Coalition

#### WHO IS THE DELAWARE SCIENCE COALITION

- \* Public school districts
- \* Charter schools
- \* The Department of Education
- \* Businesses/Corporations
- \* Higher education
- \* Informal education
- \* The Foundation for Science and Mathematics Education



**VISION:** Excellence and Equity for all students in the teaching and learning of science

**MISSION:** Build and maintain capacity at the district and school level to ensure that all students in grades K-12 meet the NGSS as part of becoming successful, productive citizens.

**CURRICULUM:** The Coalition uses a combination of inquiry-based curricular resources to meet and exceed the Next Generation Science Standards. Students learn concepts through a three dimensional approach.

**MATERIALS:** A large materials center ensures that every student has the tools and equipment needed in science. The Coalition's warehouse stores, refurbishes, sends/picks-up over 12,000 science kits to 6000 Delaware public school teachers. The materials are used for several weeks, then sent back to be refurbished and sent to another teacher, keeping costs to a minimum.

**ASSESSMENT:** The DCAS science will transition to a <u>three-dimensional science assessment system</u> aligned to the Next Generation Science Standards over the coming years. Effective educators will measure the progress of their instruction frequently through a combined use of formative, interim and summative assessments.

#### **Curricular Materials**

- Focus is on 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> grade
- Must align to Delaware NGSS Standards (<a href="https://www.doe.k12.de.us/Page/2530">https://www.doe.k12.de.us/Page/2530</a>)
- Phenomenon based/storyline requiring that students engage with meaningful experiences integrating the three dimensions of NGSS (crosscutting concepts, core ideas and practices)
- On-line student component that has common cartridge format, and that is interactive
- Accessible and equitable for **all** learners
- Assessments that are three dimensional (crosscutting concepts, core ideas and practices)
- Interdisciplinary in science and engineering components
- Available in Spanish and Mandarin Chinese or can be translated prior to Delaware Department of Education delivery.
- Has parent supports
- Connections to math/Ela Literacy (Common Core) through evidence based data and information gathering tied to argumentation, explanation and problem solving.

# **Professional Development**

Science unit/module training should include the following:

- Content learning is intertwined with pedagogical activities such as analysis of practices
- Teachers are engaged in analysis of student learning in science teaching using artifacts of practice such as student work and lesson videos
- There is a focus on specific, targeted teaching strategies
- Teachers are given opportunities to reflect and grapple with challenges to their current practice
- Learning is scaffolded by knowledgeable professional development leaders
- Analytical tools support collaborative, focused, and deep analysis of science teaching, student learning, and science content
- Professional development needs to happen more than one time
- Training should have components that are face to face and on-line
- The teachers should be able to teach the unit/module after taking the professional development training.

Reference: Science Teachers' Learning Enhancing Opportunities, Creating Supportive Contexts, Suzanne Wilson, Heidi Schweingruber, and Natalie Nielsen, National Academy of Sciences

### Science Materials Resource Center



**Science Materials Resource Center** 









100,000 students
4,000 teachers
25,000 bins
5 shipping cycles
K-10 support system

4 full-time staff members

# **Application General Requirements**

- 1. Executive Summary
- 2. Curriculum Overview
- Description of Instructional Materials (kits), Capacity for Ongoing Statewide Support
- 4. Professional Development Supports
- 5. Budget Narrative
- 6. Budget Sheet (separate Excel document)

## **Questions & Answers**

Questions can be sent to:

Meaghan Brennan, Education Associate
DE Department of Education, Finance Office
Email: <a href="mailto:meaghan.Brennan@doe.k12.de.us">meaghan.Brennan@doe.k12.de.us</a>

- Deadline for Posting Questions: January 19, 2018
- Response to Questions Posted: January 26, 2018